

Appl. No. 10/669,555
Amdt. dated June 17, 2005
Reply to Office Action of April 19, 2005

REMARKS

This is a response to the Final Office Action of April 19, 2005. In this response, claims 1, 2 and 4-14 remain pending in the application.

In the Office Action, there are objections to the Abstract, rejections to claims under 35 U.S.C. §103(a). The Applicant respectfully requests that there be reconsideration of the claims in view of the Applicants' remarks.

Objections to Abstract

In the Office Action, there are objections to the Abstract that were correct via amendment in the previous response. The Applicants respectfully request that the amendment and the previous response be acknowledged.

Rejections Under 35 U.S.C. §103(a)

Claims 1, 2 and 4-14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Huynh et al.* (U.S. 5,529,432) in view of *Goyet* (U.S. 4,677,555). The Applicants respectfully request that there be reconsideration of the claims in light of the following remarks.

With regard to rejected independent claims 1, Applicants respectfully traverse the Office Action allegation of unpatentability of the present invention over *Huynh et al.* in view

Appl. No. 10/669,555
Amdt. dated June 17, 2005
Reply to Office Action of April 19, 2005

of *Goyet*. First, the Applicants express thanks to the Examiner for his determination that *Huynh et al.* does not teach the position determining system including the laser, base station and reflector.

However, Applicants submit that *Goyet* does not complete the teaching of *Huynh et al.* by describing the position determining system including the laser, base station and reflector as suggested in the final office action. Applicants submit that *Goyet* describes a method and equipment for automatic guidance of earthmoving machines for excavation work, and more particularly, for laying drainage elements (Title, and col. 1, lines 9-12).

In addition, Applicants contend that *Goyet* further describes in detail an earthmoving machine for burying drains in the ground for catching excess water (column 1, lines 13-27; column 3, lines and 55-66). It is clear that *Goyet* only describes using a laser for the vertical guidance of the digging apparatus of earth moving machine for forming burrows in the ground for laying drainage elements." (col. 2 lines 45-52). Nowhere can Applicants find any description of a position determining system including the laser, base station and reflector of the present invention, as claimed.

Furthermore, Applicants respectfully assert that *Goyet* actually teaches away from "a laser based electronic distancing measuring device", as claimed. Applicants respectfully assert that *Goyet* teaches away from this element by utilizing a radar receiver (Fig. 3, item 18, col. 4, lines 8-14) for picking up radar waves emitted by two fixed beacons. Thus, it is the radar receiver 18 that makes it possible to determine, by triangulation, the position of the crawler unit with respect to 2 beacons (column 4, lines 32-37), and not a laser

Appl. No. 10/669,555
Amdt. dated June 17, 2005
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beam as suggested by the office action. "A reference may teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicants ... in general, a reference will teach away if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicants." *In re Gurley*, 2 F.3d 551, 31 U.S.P.Q.2d 1130, 1131 (Fed Cir. 1994).

Moreover, Applicants respectfully assert that the laser beam taught by *Goyet* is **ONLY** to control the height of the earthmoving tool to lay the drain pipe at a correct slope (col. 2, lines 33-35, lines 47-50; col. 4, lines 54-63; col. 5, lines 31-39; col. 5 line 53- col. 6, line 19). In addition, the Applicants can see no teaching or suggestion to modify the teachings of *Goyet* to utilize a laser beam for position determination. "The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984).

Likewise, Applicants respectfully assert that *Goyet* fails to teach or suggest "a laser based electronic distancing measuring device including a base station and a reflector", as claimed. As stated above, Applicants respectfully assert that *Goyet* teaches away from this element by utilizing fixed beacons on the ground (column 2, lines 33-44), instead of the base station and reflector as claimed.

Appl. No. 10/669,555
Amdl. dated June 17, 2005
Reply to Office Action of April 19, 2005

Additionally, Applicants respectfully assert that *Goyet* actually teaches away from "a laser based electronic distancing measuring device including a base station and a reflector", as claimed. Applicants respectfully assert that *Goyet* teaches away from this element by utilizing a rotating laser system that does not have a reflecting prism and it does not measure a reflection back from the prism. In a position determining system that is constantly tracking the target with a single beam, it is the return beam that is measured by the base station to determine position.

These aspects of the present invention, as recited in claim 1, clearly are neither taught nor suggested by *Goyet*. Therefore, Applicants assert that neither *Huynh et al.* or *Goyet* show or suggest all the elements of the claimed invention as required by "*In re Royka*, 490 F.2d 981,180 USPQ 580 (CCPA 1974)", and any rejection to render claim 1 obvious is inadequate and therefore should be withdrawn.

Claims 2-6 and 11-13 are dependent upon claim 1, which is believed to be allowable over *Goyet*. Therefore, these claims are allowable as a matter of law. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

With regard to rejected dependent claims 7, 8 and 14, Applicants respectfully traverse the Office Action allegation of obviousness, because there is no motivation expressed or implied to modify the teaching of the marking system of *Huynh et al.* or *Goyet* to make the claimed invention obvious. The Office Action alleges that one of ordinary skill in the art would be motivated to modify the teachings of either because it is obvious to use a compass in applications requiring specific spatial relationships or, because it is well known to use a

Appl. No. 10/669,555
Amdt. dated June 17, 2005
Reply to Office Action of April 19, 2005

gimbal structure to obtain precise measurements. Applicants respectfully disagree that either *Huynh et al.* or *Goyet* imply the combination suggested by the Office Action for the reason that neither teach a compass, a processing device responsive to the compass to determine an actual bearing of the carriage or gimbal structure, as claimed.

Therefore, the Applicants submit that there is no teaching or suggestion to modify either *Huynh et al.* or *Goyet* in the manner described in the Office Action. "The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritch*, 972 F.2d 1260, 1266, 23 U.S.P.Q.2d 1780 (Fed Cir. 1992).

Other References Cited in the Action

In addition to the references applied in the Office Action, it is respectfully submitted that Applicant's invention, as now recited in claims 1, 2 and 4-14 is neither anticipated nor rendered obvious by any of the other references cited in the Office Action, either taken alone or in combination.

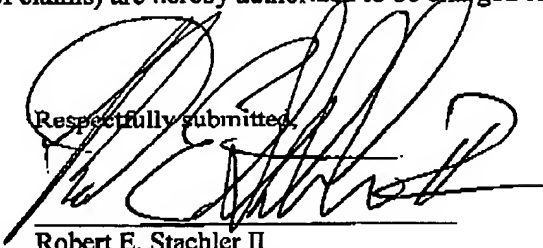
Appl. No. 10/669,555
Amdt. dated June 17, 2005
Reply to Office Action of April 19, 2005

CONCLUSION

For at least one of these reasons, Applicant respectfully submits that claims 1, 2 and 4-14 are in condition for allowance and such action by the Examiner is earnestly solicited. If the Examiner has any questions, the Examiner is requested to contact Robert E. Stachler II at (202) 973-2622.

It is not believed that any additional extensions of time are required. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required therefore (including fees for net addition of claims) are hereby authorized to be charged to Deposit Account No. 02-4300.

Respectfully submitted,


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